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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/749,504

01/02/2004

Klaus Redecker

DP-314006

8691

22851 7590 04/04/2007  
 DELPHI TECHNOLOGIES, INC.  
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EXAMINER

GELLNER, JEFFREY L

ART UNIT

PAPER NUMBER

3643

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/04/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/749,504

Applicant(s)

REDECKER ET AL.

Examiner

Jeffrey L. Gellner

Art Unit

3643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 7-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 7 and 8 is/are allowed.
- 6) ☒ Claim(s) 9-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Priority***

Applicants claim priority to P 4120599 with a certified copy of this application filed 22 June 1992 in US application 07/901,698. However, the Examiner not able to find 07/901,698. Examiner requests that Applicants submit another certified copy of P 4120599. Examiner regrets any inconvenience to Applicants due to this request.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Poole (US 5,035,757; 11<sup>th</sup> document on Applicants' 1449 received on 2 January '04).

As to claim 9, Poole discloses the use of tetrazole and peroxide in a four-component composition of fuel, oxidizer, high-temperature slag, and low-temperature slag (from col. 5 lines 49 continuing to col. 6 line 9). However, Poole discloses that both the oxidizer and the high-temperature slag component can be an inorganic peroxide ("alkaline earth metal . . . peroxides" of col. 6 lines 15-19) and both the fuel and the low-temperature slag can be tetrazole ("alkali salts of tetrazole" of col. 6 lines 19-22). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the composition of Poole to use only tetrazole and

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an inorganic peroxide in his composition depending upon the use of the composition and to reduce the concentrations of health-endangering concentrations so as to increase safety of the composition.

As to claim 10, the limitations of claim 10 are disclosed as described above. Not disclosed is the propellant composition not containing toxic gases in excess of either MAK or TLV values. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the composition of Poole by having the composition not contain toxic gases in excess of either MAK or TLV values so as to increase use of the composition.

As to claim 11, Poole further discloses 5-aminotetrazole (col. 6 lines 27-28). It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the composition of Poole by using 5-aminotetrazole depending upon availability and cost.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Poole (US 5,035,757) in view of Krampen et al. (US 4,608,102; 9<sup>th</sup> document on Applicants' 1449 received on 2 January '04).

As to claim 12, the limitations of claim 9 are disclosed as described above. Not disclosed is the use of zinc peroxide. Krampen et al., however, discloses that zinc peroxide can substitute for strontium peroxide when tetrazole is the fuel (col. 2 lines 25-29; col. 1 lines 41-47). It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the composition of Poole by using zinc peroxide depending upon availability and cost.

***Allowable Subject Matter***

Claims 7 and 8 are allowed over the art of record.

***Response to Arguments***

Applicant's arguments filed 16 January 2007 have been fully considered but they are not persuasive. Applicant's arguments generally that Boyer and Lundstrom et al. can not be combined. Examiner has used different prior art.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey L. Gellner whose telephone number is 571.272.6887. The examiner can normally be reached on Monday-Friday, 8:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Poon can be reached on 571.272.6891. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'J. Gellner', with a stylized flourish at the end.

Jeffrey L. Gellner  
Primary Examiner  
Art Unit 3643